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Readopt with amendments Env-A 2401.01 through Env-A 2406.03, effective 1-18-97 (Document #6428-B), to read as follows:

CHAPTER Env-A 2400 FERROUS AND NON-FERROUS FOUNDRIES, SMELTERS, AND INVESTMENT CASTING OPERATIONS

Statutory Authority: RSA 125-C:4

PART Env-A 2401 PURPOSE

Env-A 2401.01 <u>Purpose</u>. The purpose of this chapter is to establish emissions standards for particulate matter and visible emissions from foundries, smelters, and investment casting operations.

PART Env-A 2402 SCOPE

Env-A 2402.01 Scope. This chapter shall apply to any foundry, smelter, or investment casting operation.

PART Env-A 2403 EMISSION STANDARDS FOR FERROUS FOUNDRIES INSTALLED PRIOR TO OR ON MAY 12, 1971

Env-A 2403.01 Emission Standards for Ferrous Foundries Installed Prior to or On May 12, 1971. For any ferrous foundry installed prior to or on May 12, 1971, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "Existing Devices" as listed in Table 2103-1.

Env-A 2403.02 <u>Visible Emissions Standards for Ferrous Foundries Installed Prior to or On May 12,</u> 1971.

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any ferrous foundry installed prior to or on May 12, 1971 to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
 - (b) Opacity shall be determined in accordance with Env-A 807.

PART Env-A 2404 EMISSION STANDARDS FOR FERROUS FOUNDRIES INSTALLED AFTER MAY 12, 1971

Env-A 2404.01 Emission Standards for Ferrous Foundries Installed After May 12, 1971.

- (a) For any ferrous foundry installed after May 12, 1971, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "New Devices" as listed in Table 2103-1.
- (b) For any ferrous foundry installed or modified after June 15, 1974, in addition to those requirements stated in (a), above, no person shall cause or allow such a foundry to discharge into the ambient air any gas which contains particulate matter in excess of 50 milligrams per dry standard cubic meter, or 0.022 grains per dry standard cubic foot.

Env-A 2404.02 Visible Emission Standards for Ferrous Foundries Installed After May 12, 1971.

(a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any ferrous foundry installed after May 12, 1971 to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.

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(b) Opacity shall be determined in accordance with Env-A 807.

PART Env-A 2405 EMISSION STANDARDS FOR NON-FERROUS FOUNDRIES, SMELTERS, OR INVESTMENT CASTINGS INSTALLED PRIOR TO OR ON FEBRUARY 18, 1972

Env-A 2405.01 Non-Sulfur Emission Standards For Non-Ferrous Foundries, Smelters, and Investment Casting Operations Installed Prior to or On February 18, 1972. Subject to Env-A 2405.02, below, for any non-ferrous foundry, smelter or investment casting source installed prior to or on February 18, 1972, no person shall cause or allow the emission of particulate matter or fumes to exceed those emission standards specified for "Existing Devices" as listed in Table 2103-1.

Env-A 2405.02 <u>Calculations of Sulfur Dioxide Emission Standards for Non-Ferrous Foundries, Smelters, or Investment Casting Operations Installed Prior to or On February 18, 1972.</u>

- (a) For sulfur dioxides, the maximum allowable particulate matter emission rate from non-ferrous foundries, smelters, or investment casting operations installed prior to or on February 18, 1972 shall be calculated by the equation which is applicable for the particular kind of smelter as designated in (b) through (d), below, where:
 - (1) "X" means the total sulfur, CAS number 7704-34-9, burned in the smelter in pounds per hour;
 - (2) "Y" means the emission of sulfur dioxide, CAS number 7446-09-5, in pounds per hour;
 - (b) For copper smelters, CAS number 7440-50-8, multiply X by 0.2, as in the formula below:

Y = 0.2X

(c) For zinc smelters, CAS number 7440-66-6, raise X to the 0.85 power and multiply the result by 0.564, as in the formula below:

$$Y=0.564 X^{0.85}$$

(d) For lead smelters, CAS number 7439-92-1, raise X to the 0.77 power, and multiply the result by 0.98, as in the formula below:

$Y=0.98 \times 0.77$

Env-A 2405.03 <u>Visible Emission Standards for Non-Ferrous Foundries, Smelters, or Investment Casting</u> Operations Installed Prior to or On February 18, 1972.

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any non-ferrous foundry, smelter, or investment casting installed prior to or on February 18, 1972 to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
 - (b) Opacity shall be determined in accordance with Env-A 807.

PART Env-A 2406 EMISSION STANDARDS FOR NON-FERROUS FOUNDRIES, SMELTERS, OR INVESTMENT CASTINGS INSTALLED AFTER FEBRUARY 18, 1972

Env-A 2406.01 <u>Non-Sulfur Emission Standards For Non-Ferrous Foundries, Smelters, and Investment Casting Operations Installed After February 18, 1972</u>. Subject to Env-A 2406.02, below, for any non-ferrous foundry, smelter, or investment casting operation installed after February 18, 1972, no person shall cause or

allow the emission of particulate matter or fumes to exceed those emission standards specified for "New Devices" as listed in Table 2103-1.

Env-A 2406.02 <u>Calculation of Sulfur Dioxide Emission Standards from Non-Ferrous Foundries, Smelters and Investment Casting Operations Installed After February 18, 1972</u>. For sulfur dioxides, the maximum allowable particulate matter emission rate from non-ferrous foundries, smelters and investment casting operations installed after February 18, 1972 shall be calculated using the equation which is applicable for the particular kind of smelter, as designated in Env-A 2405.02.

Env-A 2406.03 <u>Visible Emission Standards for Non-Ferrous Foundries, Smelters, and Investment</u> Casting Operations Installed After February 18, 1972.

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any non-ferrous foundry, smelter, or investment casting operations installed after February 18, 1972, to exceed an average of 20 percent opacity for any continuous 6-minute period, except for one period of 6 continuous minutes in any 60-minute period during startup, shutdown, or malfunction.
 - (b) Opacity shall be determined in accordance with Env-A 807.

Repeal Env-A 2407.01 through Env-A 2409.01, effective 1-18-97 (Document #6428-B), as follows:

PART Env-A 2407 EMISSION STANDARDS FOR FURNACES UTILIZED AT NEW OR MODIFIED SECONDARY LEAD SMELTERS

Env-A 2407.01 Emission Standards for Blast or Cupola Furnaces Utilized at New or Modified Secondary Lead Smelters. No person shall cause or allow the emission of particulate matter from any blast or cupola furnace utilized at new or modified secondary lead smelters to exceed 50 milligrams per dry standard cubic meter, or 0.022 grains per dry standard cubic foot.

Env A 2407.02 <u>Visible Emission Standards for Blast or Cupola Furnaces Utilized at New or Modified Secondary Lead Smelters.</u>

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any blast or cupola furnace utilized at new or modified secondary lead smelters to exceed an average of 20 percent opacity or greater for any continuous 6-minute period in any 60-minute period except as specified in Env-A 2000.
 - (b) Opacity shall be determined in accordance with Env-A 807.

Env A 2407.03 <u>Visible Emission Standards for Electric Furnaces Utilized at New or Modified Secondary</u> <u>Lead Smelters.</u>

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for electric furnaces utilized at new or modified secondary lead smelters to exceed an average of 20 percent opacity for any continuous 6 minute period in any 60 minute period except as specified in Env A 2000.
 - (b) Opacity shall be determined in accordance with Env-A 807.

PART Env- A 2408 EMISSION STANDARDS FOR FURNACES UTILIZED AT NEW OR MODIFIED SECONDARY BRASS AND BRONZE INGOT PRODUCTION PLANTS

Env A 2408.01 Emission Standards for Reverbatory Furnaces of 1,000 Kilograms, or 2,205 pounds, or Greater Production Capacity Utilized at New or Modified Secondary Brass and Bronze Ingot Production Plants. No person shall cause or allow the emission of particulate matter from any reverbatory furnace of 1,000

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kilograms, or 2,205 pounds, or greater production capacity, utilized at new or modified secondary brass and bronze ingot production plants to exceed 50 milligrams per dry standard cubic meter, or 0.022 grains per dry standard cubic foot.

Env A 2408.02 <u>Visible Emission Standards for Reverbatory Furnaces of 1,000 Kilograms, or 2,205 pounds, or Greater Production Capacity Utilized at New or Modified Secondary Brass and Bronze Ingot Production Plants.</u>

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any reverbatory furnace, of 1,000 kilograms, or 2,205 pounds, or greater production capacity utilized at new or modified secondary brass and bronze ingot production plants, to exceed an average of 20 percent opacity for any continuous 6 minute period in any 60 minute period, except as specified in Env A 2000.
 - (b) Opacity shall be determined in accordance with Env-A 807.

Env A 2408.03 <u>Visible Emission Standards for Electric Furnaces of 1,000 Kilograms, or 2,205 pounds, or Greater Production Capacity and/or Blast or Cupola, Furnaces of 250 Kilograms Per Hour, 550 Pounds Per Hour, or Greater Production Capacity Utilized at New or Modified Secondary Brass and Bronze Ingot Production Plants.</u>

- (a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions from any electric furnace of 1,000 kilograms, or 2,205 pounds, or greater production capacity and/or blast or cupola, furnaces of 250 kilograms per hour, 550 pounds per hour, or greater production capacity utilized at new or modified secondary brass and bronze ingot production plants to exceed an average of 20 percent opacity for any continuous 6 minute period in any 60 minute period, except as specified in Env-A 2000.
 - (b) Opacity shall be determined in accordance with Env-A 807.

PART Env A 2409 PERMIT, FEE, TESTING, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Env A 2409.01 Permit, Fee, Testing, Monitoring, Recordkeeping, and Reporting Requirements. Sources or devices subject to this chapter shall comply with the following, where applicable:

- (a) Permit requirements specified in Env-A 600;
- (b) Fee requirements specified in Env-A 700;
- (c) Testing and monitoring requirements specified in Env-A 800; and
- (d) Recordkeeping and reporting requirements specified in Env-A 900.